

A NEW *ALLOCAPNIA* FROM VIRGINIA (PLECOPTERA: CAPNIIDAE)¹

Ralph F. Kirchner²

ABSTRACT: A winter stonefly, *Allocapnia*, is described from Wythe County, Virginia. It appears to be closely related to *A. rickeri* Frison.

Six species of *Allocapnia* have been included in the “*rickeri* group” which is characterized in the male by a short and almost bulbous apical segment of the upper limb of the epiproct in lateral view; this group may be divided into two complexes (Ross and Ricker, 1971). Complex “A” is characterized, in females, by fusion of the seventh and eighth sternites with the fusion forming a distinct heavily sclerotized arcuate ridge; “A” includes *A. cunninghami* Ross and Ricker, *A. zola* Ricker and *A. perplexa* Ross and Ricker. Complex “B” is characterized by the absence of a ridge across the line of fusion of female sternites seven and eight; “B” includes *A. rickeri* Frison, *A. sandersoni* Ricker and *A. stannardi* Ricker, although only about half of *A. stannardi* females are typical (a line of fusion may be indicated by a slight indentation and a faint dark line).

Allocapnia harperi, n. sp.

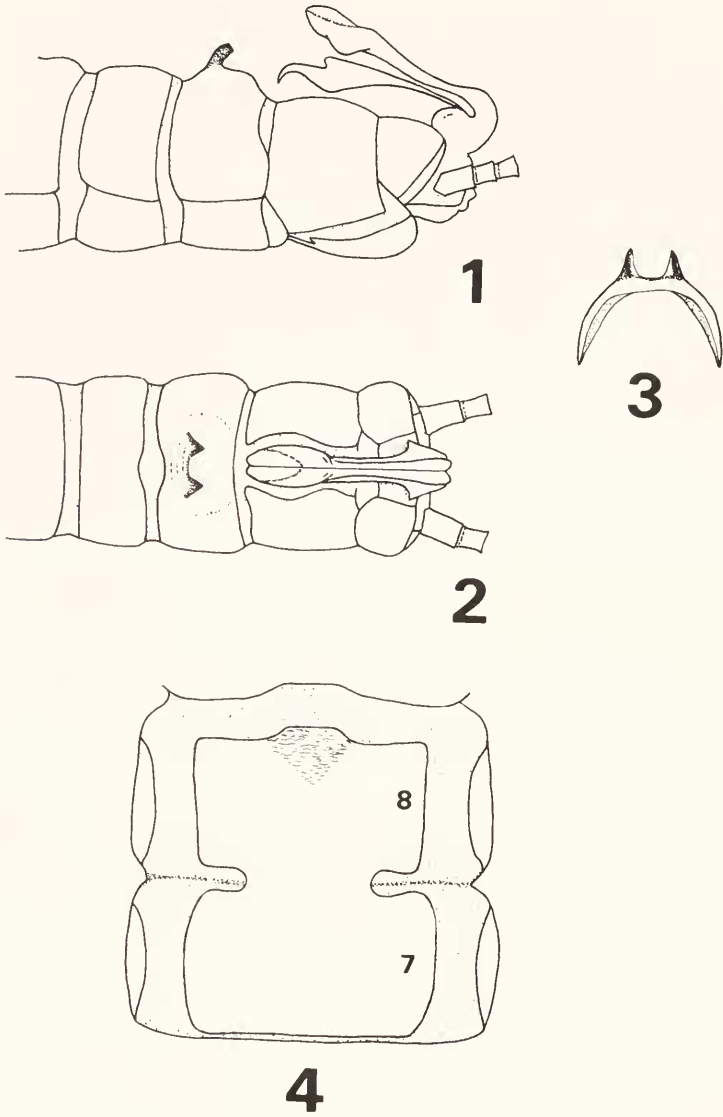
Types: Holotype (male), allotype and two paratypes (male and female) from Virginia, Wythe County, Jefferson National Forest, East Fork of Stony Fork of Reed Creek; 11 February 1979; Greg T., Matthew W. and Fred R. Voreh; these will be deposited in the United States National Museum. Ten additional specimens were obtained from the type location during 1979 (one male, three females, 27 January; two females, 29 January; two males, two females, 2 March); I will keep these.

Diagnosis: *Allocapnia harperi* is included in complex “B” of the “*rickeri* group” of *Allocapnia* since there is no ridge marking the line of fusion of the female seventh and eighth sternites. In this group, the female is unique in that the posterior margin of the eighth sternite has a relatively broad median projection. A male resembles *A. rickeri* but the shape of the dorsal process of the eighth tergite is distinctive; in lateral view, the lobes of the dorsal process are vertically directed in *A. rickeri* but are posteriorly directed in *A. harperi*; in dorsal aspect, the lobes are rounded in *A. rickeri* but have a triangular appearance in *A. harperi*.

Male (Fig. 1—3): Dark brown, almost black. Micropterous. Length of body, 6—7 mm. Seventh tergite without dorsal process. Process of eighth tergite fairly high and divided into a pair of widely separated lateral lobes which are directed posteriorly to form a deep trough. Apical segment of upper limb of epiproct about one-third length of entire process and diamond shaped in dorsal aspect. Lower limb of epiproct with apical segment fairly shallow and slightly sinuate.

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²Kirchner, Rt. 1, Box 412-A, Barboursville, West Virginia 25504.



Figures 1-4: *Allocapnia harperi*. 1. Male terminal abdominal segments (lateral). 2. Male terminal abdominal segments (dorsal). 3. Dorsal process of male eighth tergite (posterior aspect). 4. Female seventh and eighth sternites.

Female (Fig. 4): Dark brown, almost black. Micropterous. Length of body, 7—8 mm. Tergites one through eight, each with a membranous mesal stripe; nine and ten fully sclerotized. Seventh and eighth sternites solidly fused without a dividing suture. The posterior margin of the eighth sternite forms of a wide truncate or rounded projection that is transversely and irregularly rugose.

Remarks: This species is named for Dr. P.P. Harper, University of Montreal, Canada. It is known only from the type locality—a spring-fed, rocky and gravelly, fast-flowing stream. Specimens were taken between late December and early March. Other Capniidae associated with *Allocapnia harperi* include *A. loshada* Ricker, *A. nivicola* (Fitch) and *Paracapnia angulata* Hanson.

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LITERATURE CITED

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BOOKS RECEIVED AND BRIEFLY NOTED

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Intended as a critical synthesis of past and present knowledge of parasite fauna of central Asia.

SPECIES OF *APHYTIS* OF THE WORLD (HYMENOPTERA: APHELINIDAE). D. Rosen and P. DeBach. Dr. W. Junk bv Pub. 1979. 801 pp. \$136.85.

This monograph presents a biosystematic revision of an important group of natural enemies and so is intended not only as a major contribution to basic science but also to biological control because correct identification of both target pests and their natural enemies is an essential prerequisite for ultimate success in biological control.